

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended): A process for producing a rice protein concentrate from a rice substrate comprising, a) enzymatically hydrolyzing a rice substrate with i) an enzyme having granular starch hydrolyzing (GSH) activity and ii) a second starch hydrolyzing enzyme at a temperature at or below 72°C and at a pH of about 3.0 to 6.5 for a period of time sufficient for the hydrolysis of a substantial portion of the starch in the rice substrate to obtain a solubilized starch fraction and a residue fraction which includes insoluble protein and b) separating the solubilized starch fraction from the residue to obtain a rice protein concentrate, wherein the rice protein is not denatured.

Claim 2. (Original): The process according to claim 1, wherein the enzyme having GSH activity is a glucoamylase.

Claim 3. (Original): The process according to claim 2, wherein the glucoamylase is derived from a strain of *Humicola*, *Rhizopus* or *Aspergillus*.

Claim 4. (Original): The process according to claim 1, wherein the second starch hydrolyzing enzyme is an alpha-amylase.

Claim 5. (Original): The process according to claim 4, wherein the alpha amylase is derived from a bacterial source.

Claim 6. (Original): The process according to claim 1, wherein the enzyme having GSH activity is obtained from the heterologous expression of a GSH enzyme in a *Trichoderma* strain or an *Aspergillus* strain.

Claim 7. (Original): The process according to claim 1 further comprising the step purifying the rice protein concentrate.

Claim 8. (Original): The process according to claim 1 further comprising the step of drying the rice protein concentrate.

Claim 9. (Original): The process according to claim 1, wherein the protein content of the rice protein concentrate is at least about 20%.

Claim 10. (Original): The process according to claim 1, wherein the rice substrate is slurried and has a dry solid content of between 10 to 55%.

Claim 11. (Original): The process according to claim 1, wherein the temperature is between 70°C and 55°C.

Claim 12. (Original): The process according to claim 1 further comprising the step of c) enzymatically hydrolyzing the rice protein concentrate obtained in step b) with an enzyme having GSH activity and a starch hydrolyzing enzyme at a pH of about 3.0 to 6.5 and at a temperature range of 70° to 55°C to obtain a fraction including solublized starch and insoluble rice protein and d) separating the fractions to obtain a high-purity rice protein concentrate.

Claim 13. (Original): The process according to claim 12 further comprising drying the high-purity rice protein concentrate obtained in step d).

Claim 14. (Original): The process according to claim 12, wherein the starch hydrolyzing enzyme of step c) is an alpha amylase.

Claim 15. (Original): The process according to claim 12, wherein the protein content of the high-purity rice protein concentrate is at least about 60%.

Claim 16. (Original): The rice protein concentrate obtained according to the process of claim 1 or claim 12.

Claim 17. (Original): An animal feed formulation comprising the rice protein concentrate obtained according to the process of claim 1 or claim 12.

Claim 18. (Original): A human food formulation comprising the rice protein concentrate obtained according to the process of claim 1 or claim 12.

Claim 19. (Currently Amended): A method of increasing the protein content of an animal feed comprising a) contacting a rice substrate with a combination of enzymes which include a starch hydrolyzing enzyme and a granular starch hydrolyzing (GSH) enzyme at a temperature below 72°C for a sufficient period of time to hydrolyze 60% of the starch in the rice substrate, b) obtaining a solublized starch fraction and a residue, said residue including insoluble protein, c) separating the residue to obtain a rice protein concentrate and d) adding the rice protein concentrate to an animal feed, wherein the rice protein is not denatured.

Claim 20. (Original): The method according to claim 19, wherein the starch hydrolyzing enzyme is an alpha amylase.

Claim 21. (Original): The method according to claim 19 further comprising the steps of contacting the residue obtained in step d) with a GSH enzyme and optionally a starch hydrolyzing enzyme to obtain a fraction including solublized starch and a residue comprising insoluble rice protein, separating the residue to obtain a high-purity rice protein concentrate, and adding the high-purity rice protein concentrate to an animal feed.

Claim 22. (Original): An animal feed comprising the high-purity rice protein concentrate obtained according to claim 21.